WHAT IS CLAIMED IS:

1. An extruder cutting blade, comprising:

a blade body connection portion;

a blade body portion with a leading edge with a cutting blade portion and an upper leading surface and a lower leading surface extending from said leading edge to a transition zone and a blade body trailing edge and an upper and lower trailing surface extending from said transition zone to said trailing edge, said upper an lower trailing surfaces converging to form a hydrodynamically shaped blade body portion.

2. An extruder cutting blade, according to claim 1, wherein said hydrodynamically shaped blade body portion includes said upper trailing surface and said lower trailing surface converging to form a continuously diminishing cross section from said transition zone to said trailing edge.

3. An extruder cutting blade, according to claim 1, wherein said upper leading surface extends upwardly and in a trailing edge direction from said leading edge to said transition zone and said lower trailing surface extends substantially in a trailing edge direction from said leading edge to said transition zone.

4. An extruder cutting blade, according to claim 1, wherein said blade body portion

cutting blade portion has a sickle shape.

5. An extruder cutting blade, according to claim 4, wherein said sickle shape includes said cutting blade portion progressing from a leading location toward a trailing location as it extends radially outwardly from said blade body connection portion.

6. An underwater pelletizer, comprising:

a shaft;

a pelletizer fluid passage structure forming a fluid coolant flow passage, said shaft being supported relative to said fluid passage structure with said shaft extending into said fluid coolant flow passage;

a pelletizer die plate with a plastic extrudate side in said fluid coolant flow passage; and

an extruder cutting blade with a blade body connection portion connected to said shaft and a blade body portion with a leading edge with a cutting blade portion and an upper leading surface and a lower leading surface extending from said leading edge to a transition zone and a blade body trailing edge and an upper and lower trailing surface extending from said transition zone to said trailing edge, said upper and lower trailing surfaces converging to form a hydrodynamically shaped blade body portion with said pelletizer die plate being disposed such that the polymer material is extruded into the fluid coolant flow passage and is cut by said blade.

7. An underwater pelletizer, according to claim 6, wherein said hydrodynamically shaped blade body portion includes said upper trailing surface and said lower trailing surface

converging to form a continuously diminishing cross section from said transition zone to said trailing edge.

8. An underwater pelletizer according to claim 6, wherein said upper leading surface extends upwardly and in a trailing edge direction from said leading edge to said transition zone and said lower trailing surface extends substantially in a trailing edge direction from said leading edge to said transition zone.

9. An underwater pelletizer according to claim 6, wherein said blade body portion cutting blade portion has a sickle shape with the blade of said cutting blade portion progressing from a leading location toward a trailing location as it extends radially outwardly from said blade body connection portion.

10. An extruder cutting blade, comprising:

a blade body connection portion;

a blade body portion with a leading edge with a cutting blade portion and upper and lower leading surfaces extending to a transition zone and a blade body trailing edge and an upper and lower trailing surface extending from said transition zone to said trailing edge, said cutting blade having a sickle shape.

11. An extruder cutting blade, according to claim 10, wherein said sickle shape includes said cutting blade portion progressing from a leading location toward a trailing location as it

extends radially outwardly from said blade body connection portion.

12 An extruder cutting blade, according to claim 11, wherein said upper and lower trailing surface extend from said transition zone to said trailing edge and said upper and lower trailing surfaces converge to form a hydrodynamically shaped blade body portion.

13 An extruder cutting blade, according to claim 10, wherein said upper and lower trailing surfaces converge to form a continuously diminishing cross section from said transition zone to said trailing edge.

14. An extruder cutting blade, according to claim 12, wherein said upper leading surface extends upwardly and in a trailing edge direction from said leading edge to said transition zone and said lower trailing surface extends substantially in a trailing edge direction from said leading edge to said transition zone.